AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently amended): Internal combustion engine, with direct gasoline injection and controlled ~~injection~~ ignition, comprising:

_____at least one cylinder,

_____a cylinder head closing the cylinder,

_____a piston slidingly arranged in the cylinder,

_____a combustion chamber defined between the piston and the cylinder head,

_____means for injecting gasoline into the combustion chamber,

_____~~ignition means~~ means for ignition intended to produce an ignition of ~~the~~ an air-gasoline mixture in the combustion chamber,

_____intake valves and exhaust valves, selectively closing the combustion chamber, and

_____means for recirculating at least a portion of ~~the~~ exhaust gases into the combustion chamber during ~~the~~ an air intake phase,

_____wherein ~~the~~ a pressure provided to the injection means is above 250 bars, so as to homogenize ~~the~~ an air-gasoline-recirculated exhaust gases mixture and to increase ~~the~~ a combustion speed.

2. (Previously presented): Engine according to claim 1, wherein the exhaust gases reintroduced into the combustion chamber represent a residual ratio above 20%.

3. (Previously presented): Engine according to claim 1, wherein at least a portion of the recirculated exhaust gases is reintroduced into the combustion chamber by a so-called "external" route (EGR), i.e., via a derivation conduit.

4. (Previously presented): Engine according to claim 1, wherein at least a portion of the recirculated exhaust gases is reintroduced into the combustion chamber via a so-called "internal" route (IGR), i.e., by appropriate control of the intake valves and exhaust valves.

5. (Previously presented): Engine according to claim 1, wherein the gasoline injection means and the ignition means are separated by a distance comprised between 5 and 30 millimeters.

6. (Previously presented): Engine according to claim 1, wherein the injection means and the ignition means are disposed in the cylinder head according to two respective axes forming an angle (θ) above 35°.

7. (Previously presented): Engine according to claim 1, wherein the injection means inject gasoline during the compression phase of the engine cycle.

8. (Previously presented): Engine according to claim 1, wherein the injection means inject gasoline during the intake phase of the engine cycle.

9. (Previously presented): Engine according to claim 2, wherein the exhaust gases reintroduced into the combustion chamber represent a residual ratio comprised between 40 and 60%.

10. (New): Method of controlling injection in an internal combustion engine with direct gasoline ignition, said engine comprising at least one cylinder, a cylinder head closing the cylinder, a piston slidingly arranged in the cylinder, a combustion chamber defined between the piston and the cylinder head, and intake valves and exhaust valves, selectively closing the combustion chamber, said method comprising:

injecting gasoline into the combustion chamber at a pressure above 250 bars,

producing an ignition of an air-gasoline mixture in the combustion chamber,

recirculating at least a portion of exhaust gases into the combustion chamber during an air intake phase,

so as to homogenize air-gasoline-recirculated exhaust gases mixture and to increase a combustion speed.

11. (New): Method according to claim 10, wherein the exhaust gases reintroduced into the combustion chamber represent a residual ratio above 20%.

12. (New): Method according to claim 10, wherein at least a portion of the recirculated exhaust gases is reintroduced into the combustion chamber by a so-called "external" route (EGR), i.e., via a derivation conduit.

13. (New): Method according to claim 10, wherein at least a portion of the recirculated exhaust gases is reintroduced into the combustion chamber via a so-called "internal" route (IGR), i.e., by appropriate control of the intake valves and exhaust valves.

14. (New): Method according to claim 10, wherein the location where gasoline is injected and the location where ignition is performed are separated by a distance comprised between 5 and 30 millimeters.

15. (New): Engine according to claim 10, wherein an axis of injection and an axis of ignition are disposed in the cylinder head forming an angle (θ) above 35°.

16. (New): Engine according to claim 10, wherein gasoline is injected during the compression phase of the engine cycle.

17. (New): Engine according to claim 10, wherein gasoline is injected during the intake phase of the engine cycle.

18. (New): Engine according to claim 11, wherein the exhaust gases reintroduced into the combustion chamber represent a residual ratio comprised between 40 and 60%.